

I CLAIM;

1. A cylinder holder for retaining a workpiece cylinder for impact resistant storage of the workpiece cylinder, the cylinder holder having:

a) a body having a cavity, the cavity to receive the workpiece cylinder, the cavity having a longitudinal central axis generally corresponding to a longitudinal axis of the workpiece cylinder when the workpiece cylinder is positioned within the cavity during the impact resistant storage;

b) longitudinal resilient containment means to provide for a resilient containment of the workpiece cylinder within the cavity of the body of the cylinder holder during periods of longitudinal stress;

c) lateral resilient positioning means to provide for a resilient positioning of the workpiece cylinder within the cavity of the body wherein the longitudinal axis of the workpiece cylinder may move laterally within a three hundred and sixty degree radial range away from the longitudinal central axis of the cavity of the body during periods of lateral stress and return generally to the longitudinal central axis of the cavity following termination of the lateral stress.

2. The cylinder holder defined in claim 1 wherein the body is formed of two generally identical shell components, each shell component having:

a) a base wall;

b) a first longitudinal wall extending from the base wall;

c) a second longitudinal wall extending from the base wall opposite the first longitudinal wall;

d) an end wall extending from the base wall and connected to the first longitudinal wall and the second longitudinal wall.

3. The cylinder holder defined in claim 2 wherein the first longitudinal wall of each of the shell components has an outer edge flange and wherein the second longitudinal wall of each of the shell components has an outer edge flange and wherein the outer edge flange of the first longitudinal wall of a first of the shell components

mates with the outer edge flange of the second longitudinal wall of a second of the shell components when forming the body of the cylinder holder and wherein the outer edge flange of the second longitudinal wall of the first of the shell components mates with the outer edge flange of the first longitudinal wall of the second of the shell components when forming the body of the cylinder holder.

4. The cylinder holder defined in claim 2 wherein the base wall of each of the identical shell components further has a service passageway therethrough to provide for ready access to the cavity of the body.

5. The cylinder holder defined in claim 1 wherein the body further comprises a plurality of drainage apertures to provide for a drainage of fluids from the cylinder holder.

6. The cylinder holder defined in claim 1 wherein a plurality of bodies are securely connected together to form an array of cylinder holders to retain a plurality of the workpiece cylinders, each of the bodies having the longitudinal resilient containment means and the lateral resilient positioning means.

7. The cylinder holder defined in claim 1 wherein the longitudinal resilient containment means further comprises an elastomer strap fixedly attached to the body of the cylinder holder at a first end of the elastomer strap and releaseably attached to the body of the cylinder holder at a second end of the elastomer strap, the elastomer strap having a restricting orientation where the second end of the elastomer strap is attached to the body of the cylinder holder and a released orientation where the second end of the elastomer strap is released from the body of the cylinder holder, the elastomer strap to apply a pressure to the workpiece cylinder during the resilient containment of the workpiece cylinder within the cavity of the body of the cylinder holder when the elastomer strap is in the restricting orientation.

8. The cylinder holder defined in claim 7 wherein the elastomer strap further comprises a broadened contact area proximate a longitudinal central axis of the cavity of the body when the elastomer strap is in the restricting orientation.

9. The cylinder holder defined in claim 1 wherein the lateral resilient positioning means further comprises a plurality of automatic adjusting slide assemblies positioned relative to the cavity of the body, each automatic adjusting slide assembly having:

- a) a slide member to provide for a slidable contact with the workpiece cylinder during the storage of the workpiece cylinder within the cylinder holder;
- b) positioning means to provide for the slide member to move relative to the body of the cylinder holder within the cavity of the body;
- c) biasing means to provide for applying a pressure to the slide member generally toward a longitudinal central axis of the cavity of the body when the workpiece cylinder is stored within the cylinder holder.

10. The cylinder holder defined in claim 9 wherein the positioning means further comprises a pivotal coupling wherein the slide member pivots relative to the body of the cylinder holder.

11. A cylinder holder for a secure containment of a workpiece cylinder, the cylinder holder having:

- a) a body having:
 - 1) an access end having an opening;
 - 2) an interior accessible through the opening of the access end, the workpiece cylinder generally positioned within the interior during the secure containment of the workpiece cylinder by the cylinder holder;
 - 3) a longitudinal central axis extending through the interior;
- b) a plurality of cylinder engagement surfaces positioned within the interior of the body, the cylinder engagement surfaces to provide for contact with the workpiece cylinder during the secure containment of the workpiece cylinder by the cylinder holder;

c) biasing means to independently bias each of the cylinder engagement surfaces generally toward the longitudinal central axis of the body wherein a pressure is applied to the workpiece cylinder by the cylinder engagement surfaces during the secure containment of the workpiece cylinder by the cylinder holder;

d) a retaining member selectively positionable relative to the opening of the access end of the body, the retaining member having a blocking state and a free passage state relative to the opening of the access end of the body, the free passage state to provide for the workpiece cylinder to be moved through the opening of the access end of the body, the blocking state to provide for the workpiece cylinder to be prevented from moving through the opening of the access end of the body.

12. The cylinder holder defined in claim 11 wherein pairs of the cylinder engagement surfaces are radially positioned within the interior of the body, each pair of the cylinder engagement surfaces spaced apart, each pair of the cylinder engagement surfaces generally parallel to and spaced from the longitudinal central axis of the body.

13. The cylinder holder defined in claim 12 wherein at least four pairs of the cylinder engagement surfaces are radially positioned within the interior of the body.

14. The cylinder holder defined in claim 11 wherein the cylinder engagement surfaces are pivotally connected relative to the body of the cylinder holder.

15. The cylinder holder defined in claim 11 wherein the body further comprises a pressure gauge view area at the access end of the body to provide for ready viewing of a pressure gauge of the workpiece cylinder properly positioned and contained within the cylinder holder.

16. The cylinder holder defined in claim 11 wherein the body is substantially formed from two generally identical shell components.

17. The cylinder holder defined in claim 11 wherein the body further comprises wall members generally defining the interior of the body and wherein a plurality of strengthening gussets extend between select adjacent wall members to structurally reinforce the cylinder holder.

18. The cylinder holder defined in claim 11 further comprising a resilient base pad positioned within the interior of the body distal from the access end of the body, the resilient base pad to contact the workpiece cylinder while the workpiece cylinder is properly positioned and contained within the cylinder holder.

19. The cylinder holder defined in claim 11 further comprising a plurality of mounting apertures positioned about the body wherein a plurality of cylinder holders are securely attached together utilizing the mounting apertures of each cylinder holder to form an array of cylinder holders.

20. The cylinder holder defined in claim 11 wherein the biasing means further comprises a range of motion sufficient to provide for the cylinder engagement surfaces to operate with various workpiece cylinders having various diametric measurements.